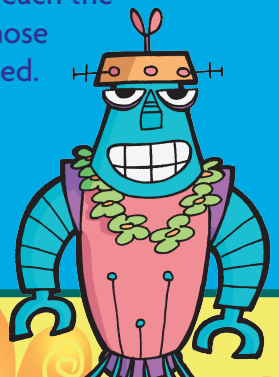
ACTIVITY: PLAY CAPTURE THE CHIP!

Goal: To use both direction and distance to move an object to a specific location.

1. Ask for two volunteers. Blindfold one of the kids, and have the other stand somewhere in the room so the blindfolded person cannot get there by moving in a straight line. (No objects should block the path.) Ask: **How do we tell our blindfolded volunteer how to get to where the other person is standing?** Listen to responses. If necessary, prompt: **We need to tell which direction to go** *(to the left, to the right, or straight ahead),* **and how far** *(how many steps to take).* Have kids give directions in this way so the blindfolded person can get to the spot.

   Optional: Use the episode or segment to further explore this idea.

2. Review how the group needed to use both direction *and* distance to help the blindfolded volunteer reach the spot. Using either one of those alone would not have worked. Then tell kids they will use this same idea in a game called "Capture the Chip!."



Explain: **You have sent a remotely operated Cyborg to Faraway Island to rescue Motherboard's encryptor chip from Hacker. Unfortunately, you don't know where your Cyborg has landed! And to make matters worse, Hacker has set traps all over the island, so you have to be careful when telling your Cyborg which way and how far to go. Fortunately, however, your opponent is in the same situation that you are. To win the game, you have to figure out where your Cyborg has landed, and then get to the chip before your opponent does!**

3. Have partners sit facing each other with the book standing open between them (so each cannot see the other's map). Explain why each has two game pieces: one is their opponent's Cyborg, and the other is used to track their own Cyborg once they have figured out where it is.

   Before playing, review the map. Point out that each square represents one cybermile; the compass at the top shows North (towards the top of the map), East (towards the right), etc.

   Remind them that each instruction they give their Cyborg must include a direction *and* a distance.

4. Review with kids the "How to Play 'Capture the Chip!'" game directions. Show them how to use the spinners, and let the fun start! As kids play, listen for problems and suggest strategies.

5. To close, ask: **Can you think of other ways we use both direction and distance to locate things?** *(Reading a map, surveying a piece of land, navigating a ship at sea or a plane in the air, using direction and distance with landmarks to avoid getting lost).* Provide kids with handouts so they can play at home.